ROBERT G. LYNN

IBLA 81-488 Decided January 19, 1982

Appeal from decision of the Wyoming State Office, Bureau of Land Management, rejecting oil and gas lease offer W 67264 in its entirety.

Affirmed.

1. Oil and Gas Leases: Discovery--Oil and Gas Leases: Known Geologic Structure--Oil and Gas Leases: Noncompetitive Leases--Oil and Gas Leases: Production

   A determination by the Geological Survey that certain lands are within the known geologic structure of a producing oil and gas field does not guarantee the productive quality of the lands included in the structure. The boundaries of a known geologic structure of a producing oil and gas field are defined for administrative purposes and cannot be taken as with absolute accuracy showing the extent, in each instance, of the geologic structure producing oil and gas.

2. Oil and Gas Leases: Discovery--Oil and Gas Leases: Known Geologic Structure

   A determination by the Geological Survey of the known geologic structure of a producing oil and gas field will not be disturbed in the absence of a clear and definite showing that the determination was improperly made.

APPEARANCES: Robert G. Lynn, pro se.

OPINION BY ADMINISTRATIVE JUDGE BURSKI

Robert G. Lynn appeals from the February 24, 1981, decision of the Wyoming State Office, Bureau of Land Management (BLM), rejecting in its entirety noncompetitive oil and gas lease offer W 67264. BLM in its

decision stated that all lands in W 67264 are situated within various known geologic structures (KGS) of a producing oil or gas field. As a result, the lands could only be leased by competitive bidding. 43 CFR 3101.1-1.

In February 1979, appellant offered to lease the following lands in T. 38 N., R. 78 W., 6th principal meridian, Natrona County, Wyoming:

Sec. 12: W 1/2 NE 1/4;
Sec. 22: NW 1/4 NW 1/4, S 1/2 NW 1/4, SW 1/4, W 1/2 SE 1/4;
Sec. 24: NW 1/4, W 1/2 SW 1/4, N 1/2 SE 1/4;
Sec. 27: W 1/2, N 1/2 NE 1/4:
Sec. 28: N 1/2 NE 1/4, NE 1/4 SE 1/4;
Sec. 34: NE 1/4 NW 1/4;
Sec. 35: N 1/2 NW 1/4.

Most of these lands lie within a mile of the Naval Petroleum Reserve No. 3 (PLO 2364). After conducting an exploratory drilling program which included drilling along the reserve boundary, the Department of Energy (DOE) on July 1, 1980, withdrew its initial objections to drilling in the 1-mile buffer zone surrounding the reserve. On January 16, 1981, Survey forwarded to BLM descriptions of lands that Survey determined to be within the Teapot undefined KGS and undefined additions to the North Sage Spring Creek, East Teapot, and South Teapot fields. BLM then issued its decision based on Survey's information. 1/

Appellant argues on appeal that Survey's evidence fails to support its conclusion that these lands are presumptively productive. He claims that Survey's evidence was too sketchy to satisfy the guidelines found in its circular 419. 2/ He asserts that Survey's determinations were based on the locations of "dry holes 'with shows'" or the absence of dry holes. He attacks the brevity of Survey's geologic evaluations and asserts a lack of consultation between Survey and the Director of the nearby Naval Petroleum Reserve. He cites a meeting with the Director of the Reserve in which the Director opined that production in the area was bounded by a water interface and a fault.

[1] A known geologic structure is "the trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.0-5(a). A determination that certain lands are in a KGS of a producing oil and gas field does not guarantee the productive quality of those lands. Such a determination only announces that on the basis of geological evidence the Department has found that a certain structure has trapped accumulated oil and gas. KGS designation recognizes the existence of a continuous entrapping

1/ While the decision of the Wyoming State Office did not so indicate, the N 1/2 NW 1/4 sec. 35 had been within the North Sage Spring Creek KGS since at least Feb. 22, 1979, as shown by the oil and gas plat of that date.
2/ E. A. Finley, The Definition of Known Geologic Structures of Producing Oil and Gas Fields (1959).

structure on some part of which there is production. KGS designation does not indicate what is known of the productivity of the lands in a structure. Nor does it predict future productivity. James Muslow, 51 IBLA 19 (1980); Vernon Benson, 48 IBLA 64 (1980). The initial boundaries of a KGS are not preclusive of the possibility of future changes. The boundaries are defined for administrative purposes and cannot be taken as absolutely and accurately showing the extent of the geological structure producing oil or gas. Robert G. Lynn, 60 IBLA 117 (1981); James Muslow, supra; Columbus C. Mabry, 55 I.D. 530 (1936).

The Secretary of the Interior has delegated the duty to determine the existence and extent of a KGS of a producing oil and gas field to the Director of the Geological Survey, D.M. 220.4.1G; 43 CFR 3100.7-1. When Survey makes such a determination, the Secretary is entitled to rely upon the reasoned opinion of his technical expert in the field. Curtis Wheeler, 31 IBLA 221 (1977). See also Exxon Co., U.S.A., 15 IBLA 345, 354 (1974); Clear Creek Inn Corp., 7 IBLA 200, 213-214, 79 I.D. 571, 578 (1972).

By four memoranda sent to appellant, Survey elaborated upon its rationale:

> The North Sage Spring Creek field has been expanded due to data obtained from a field study of the Teapot Dome area. This addition, consisting of 560 acres, is being added on the basis of a Dakota sand limit line and an oil show in Fred Goodstein's well No. 3 (SW 1/4 SE 1/4, sec. 25, T. 38 N., R. 78 W.). All 40 acre subdivisions lying 50% or more within the Dakota sand limit line are included. The accumulation is due to a combination of structural and stratigraphic factors. No new wells are currently planned for the immediate area. The effective date of this action is January 16, 1981, the date the latest Teapot Dome field study was completed. Data is from IWR's, PI, well logs, Casper District Oil and Gas lease and well files, Regional Oil and Gas lease - well, and field files, Regional RE T & R and field files, Unit files, Wyoming Oil and Gas Commission T & R files, the WGA 1957 Wyoming Oil and Gas fields Symposium, and large rolled field study maps on the Teapot Dome area put together during the last quarter of 1980.
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> The East Teapot field has been expanded due to data obtained from a field study of the Teapot Dome area. This addition, consisting of 1680.2 acres, is being added on the basis of structure contouring of the Dakota sand interval (down dip shows or production used as a limiting factor), well control limiting the possibility of production from all presently known productive horizons, complex faulting and fracturing inherent to the area, and the addition being within an area geologically and geographically interpreted as being presumptively productive. All lots or 40 acre subdivisions lying approximately 50% or more within the area

delineated by the above factors are included in this addition. The accumulation is due to a combination of structural and stratigraphic factors. No new wells are planned for the immediate area. The effective date of this action is January 16, 1981, the date the latest Teapot Dome field study was completed. Data is from IWR's, P.I., well logs, Casper District Oil and Gas lease and well files, Regional Oil and Gas lease - well and field files, Regional RE T & R and field files, the WGA 1957 Wyoming Oil and Gas fields Symposium, and large rolled field study maps on the Teapot Dome area put together during the last quarter of 1980.

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The South Teapot field has been expanded due to data obtained from a field study of the Teapot Dome area. This addition, consisting of 80 acres, is being added on the basis of a Dakota sand limit line and a Dakota oil show in Tigoods well No. 4-E (NE 1/4 SE 1/4, sec. 24, T. 38 N., R. 78 W.). All 40 acre subdivisions lying 50% or more within the Dakota sand limit line are included. The accumulation is primarily stratigraphic. No new wells are planned for the immediate area. The effective date of this action is January 16, 1981, the date the latest Teapot Dome field study was completed. Data is from IWR's, PI, well logs, Casper District Oil and Gas lease and well files, Regional Oil and Gas lease-well and field files, Regional RE T & R and field files, Unit files, Wyoming Oil and Gas Commission T & R files, the WGA 1957 Wyoming Oil and Gas fields Symposium, and large rolled field study maps on the Teapot Dome area put together during the last quarter of 1980.

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The Teapot K.G.S. has been created on the basis of considerable drilling activity and other complex factors including:

1. Structure contouring of Dakota sand interval (down dip shows or production used as a limiting factor).

2. Well control limiting the possibility of production from all presently known productive horizons.

3. Complex faulting and fracturing inherent to the area.

4. Being within an area geologically and geographically interpreted as being presumptively productive.

All lots or 40 acre subdivisions lying approximately 50% or more within the area delineated by the above four factors

> are included in this addition. 16,405.39 acres is the entirety of this addition. Eleven horizons (first and second Shannon sands, Steele shale, Niobrara shale, second Wall Creek sand, third Wall Creek sand, Muddy sand, Dakota sand, Lakota sand, Morrison sand, and Tensleep sand) are known to be productive within this field. Trapping mechanisms include structural, stratigraphic, and a combination of these two types. The effective date of this action is January 16, 1981, the completion date of the current Teapot field study.
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> Data is from well logs, PI, IWR's, Casper District Oil and Gas lease and well files, Regional Oil and Gas lease - well and field files, Regional RE T & R and field files, unit files, Wyoming Oil and Gas Commission T & R files, the WGA 1957 Wyoming Oil and Gas fields Symposium, and large rolled field study maps on the Teapot Dome area put together during the last quarter of 1980.

These finding comport with the standards outlined above and in circular 419. Survey based each of these KGS designations on geologic factors and/or oil shows.

[2] An applicant for an oil and gas lease who challenges a determination by Survey that lands are situated within a KGS of a producing oil or gas field has the burden of showing that the determination is in error. The determination will not be disturbed in the absence of a clear and definite showing of error. Jack J. Bender, 54 IBLA 375, 88 I.D. 550 (1981); Curtis Wheeler, supra; Guy W. Franson, 30 IBLA 123 (1977); James A. Wallender, 26 IBLA 317 (1976). The evidence which appellant has provided on appeal is insufficient to persuade us that the KGS determination made by Survey is erroneous. See Robert G. Lynn, supra.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

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James L. Burski
Administrative Judge

We concur:

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Bernard V. Parrette
Chief Administrative Judge

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Douglas E. Henriques
Administrative Judge